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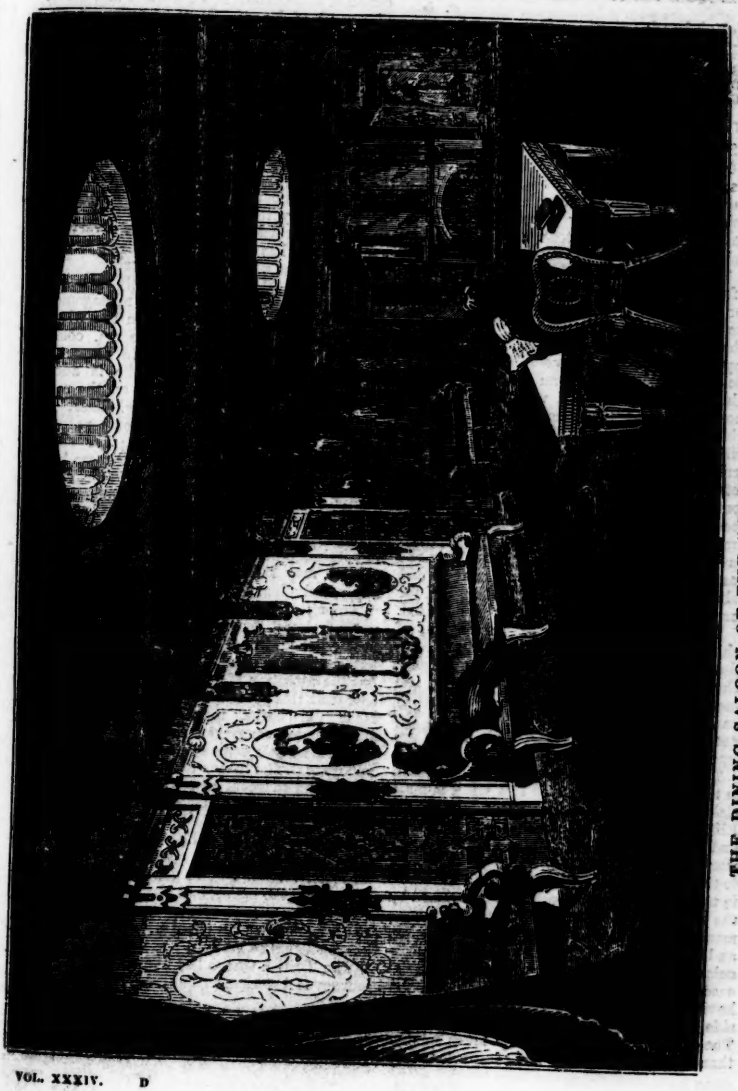

THE DINING SALOON OF THE "BRITISH QUEEN" STEAMER,

ENGRAVED FROM THE DRAWING BY MR. SIMPSON, OF 456, STRAND.

THE BRITISH QUEEN STEAMER.

THIS splendid and powerful vessel was built by Messrs. Curling and Young, of Limehouse, for the British and American Steam Navigation Company. She was launched at the close of May, 1838.—The following are the dimensions of this vessel:

	ft.	in.
Length from figure-head to taffrail - -	275	0
Length of upper deck - - - -	245	0
Breadth within the paddle-boxes - -	40	6
Breadth over all - - - - -	64	0
Depth of hold - - - - - -	27	0
Estimated weight of engines, boiler and water - - - - - -	500	tons
Twenty days' consumption of coal - -	600	ditto

She has two splendid engines aboard, of 250 horse-power each, which, for strength, beauty, and excellence of fitting, are admirable. Each engine stands on a single plate of metal, weighing 35 cwt.; four pieces of the frame-work weigh each 16 tons. The cylinders weigh each 12 tons—the diameter of the bore is 77½ inches, and the stroke of the engine is 7 feet. She has in all four boilers, any number of which can be used at one time without the others. The diameter of the paddle-wheels is 31 feet 6 inches. According to her depth in the water the revolutions of her paddle-wheels will vary from 15 to 16 in a minute. She is supplied with Hall's patent condensers, and thus the same water with which her boilers are filled in the Thames will, with a little addition, serve until her arrival at New York. She has iron tanks between the timbers in the hold capable of containing 200 tons of water, all of which is accessible to the pumps, and can thereby be drawn out and conveyed by pipes to the different berths. But over and above this she has a patent still with her, and can convert salt-water into fresh for her boilers, and for the use of the passengers, as may be required.

The accommodations for passengers, of which she will take upwards of 200, are complete and commodious, as well as elegant. There are two saloons, one for a dining, and one for a drawing, or ladies' room, immediately leading from the principal staircase, and the state-rooms communicating with them are especially spacious and agreeable.

The dining-saloon, about 60 feet long, and, in the widest part, near 30 feet wide, is most elaborately fitted up, and decorated in the Elizabethan style, embellished with devices and historical subjects, painted in a very superior manner upon a new material, which gives to the painting an appearance of being worked in tapestry or worsted work, and is enriched by the additions of carvings of flowers, and ornaments, and gilding, at once chaste in design, and excellent in execution. It is particularly well lighted from above. The staircase is of a description quite novel in a ship, having a double flight descending on each side, and is very richly carved in English oak. The drawing or ladies' room is much smaller than the main saloon, but decorated very neatly in white, with gold mouldings, and arabesque paintings in colours to correspond, so as, for extent, (as they form a vista of near 100 feet in length,) variety, and elegance, we can safely say, that this suite of rooms has never been surpassed (if equalled,) on board any ship. The whole of the design and execution of these cabins is the work of Mr. W. B. Simpson,* of No. 456, West Strand, London. The furniture, which is particularly elegant and appropriate, is supplied by Mr. Boyd, of Glasgow, and other upholstery by Scotch manufacturers. The berths are fitted up with every attention to convenience. There are 104 beds fitted up aft, and 103 forward. The steward's room is fitted up with almost every conceivable convenience, and affords a passage for conveying the dinner from the gallery to the dining-saloon without incommoding or being seen by the crew or passengers. The delft ware, which appears to be of a very excellent kind, has been made specially for the vessel, and the silver plate is superb.

She carries 32 hands immediately connected with the superintendence and management of the engines; and her crew, in the whole, including officers, seamen, engineers, cooks, steward, &c., amount to 85. In respect of stores and general fitting out, she is admirably formed, and everything is on the most improved construction. Her windlass, for example, is of Tyzich and Dobson's patent; her stoppers of Moffat's patent; her chain cables are of 1⅞ iron, and are of the same kind as are used for 74 gun ships. Her small bower, best bower, and sheet anchor, weigh respectively, 32½ cwt., 43 cwt., and 47½ cwt. No pains, time, or expense, have been spared in obtaining perfection; and taking her all in all, we may safely say she is unequalled by any vessel afloat.

Among other conveniences for passengers, we had almost forgotten one; on the deck is a neat erection, in which cold, warm, or shower baths may be obtained by the passengers; but the attention of the owners still goes further than this; even smokers are not forgotten. Near the baths, is a cigar room, where smokers may congregate and enjoy themselves to their heart's content—unannoyed and unannoying. The cabins of the captain, chief-mate, and surgeon, are on the quarter-deck, and the roof forms a shelter for the steersman. She is steered by a double wheel, similar to those used by London East Indiamen or line-of-battle ships. She is commanded by Lieut. Roberts, R. N., who so gallantly crossed the Atlantic in the Sirius, and was enthusiastically received by the Americans on that occasion; and on this we anticipate for him and his brave officers as glorious a welcome.

The British Queen left the Thames on her journey to America, on Thursday, the 11th inst.

* We are indebted to Mr. Simpson for the accompanying view of the dining-saloon of the above splendid vessel;—he having, with the greatest politeness, granted us the use of his drawings.

LEGENDS OF THE WESTERN HIGHLANDS.

THE PILOT.

As Donald M'Cuarig, or, as it is generally written, Macquarrie, a young fisherman of Mull, one of the largest of the Hebrides, was pursuing his avocation on the north-east coast of his native island, he descried a large ship, which had rounded the Point of Duart, in imminent danger of running on a reef of sunken rocks stretching across the channel from the southern extremity of the island of Lismore. After watching the progress of the vessel, with some anxiety for her safety, he concluded, from the course she held, that she was navigated by persons totally ignorant of the dangers by which they were surrounded. He therefore made towards them, and, hailing the ship, succeeded by his gestures in apprising them of the danger into which they were running. The ship then hove to, and he was taken on board, where he was made to comprehend, in broken English, of which he understood a little, that they were Danish, and had lost their pilot on the previous day.

The young fisherman readily undertook to pilot them southward, through the dangerous and intricate navigation of the western coast.

The Dane having weathered the Mull of Kintire, stood out towards the middle of the Irish Channel, in order to avoid all chance of a danger similar to that from which he had just escaped, leaving his pilot the option of making for the land in his frail bark, or continuing the voyage. Macquarrie remonstrated, at first in his broken English, and afterwards in his native language, against this act of ingratitude, but was only laughed at. Irritated to the last degree, he drew his dirk, and made a plunge at the perfidious captain. The latter, however, parried the blow, and the fisherman was overpowered before he could make a second attempt. He was then put into irons, where he remained several days, entirely ignorant of what might be his ultimate fate, as well as of the destination of the ship, which, with its crew, he had saved from inevitable destruction.

The only circumstance from which he could draw a conclusion at all favourable to the character of the party into whose power he had fallen, was the fact of his being supplied with abundance of provisions during the period of his imprisonment.

The ship at length came to anchor; and, on the evening of the following day, the captain made his appearance, accompanied by one of the crew, who knocked off the fetters of the unfortunate pilot. When he came on deck, the ungrateful captain told him scoffingly "that he might go on shore to visit his friends in Lisbon!" He was accordingly landed on the principal quay, a stranger, both to the people among whom fate had thrown him, and their language; and also destitute of the smallest fraction of that excellent substitute for friends, language, and almost everything else—money.

Vowing vengeance, which he had not at present the most distant prospect of executing, against his Danish friends, he proceeded along the quay, followed by a crowd of idlers, attracted by the singularity of his dress, and the strange imprecations he poured forth against those who had kidnapped him.

The gaping crowd, highly amused at this novel exhibition, contented themselves at first with passing sundry jokes on the Highlander's dress and vehement gesticulations. This mode of expressing their sympathy for his misfortunes, not being understood by the stranger, they next proceeded to bestow upon him more substantial and intelligible proofs of their hospitable disposition, by pulling his dress about, and the laudable view of keeping up the mental irritation which appeared to afford them infinite relish, from its effects on the outward man of poor Macquarrie. The fisherman, being a powerful man, resented this impertinence, by laying about him most lustily. Just at this critical moment, a man of commanding appearance made his way with some difficulty through the crowd, and addressing the object of their curiosity in a language which he seemed to understand, he assured the bystanders that he was under the protection of the English ambassador. The magic words were no sooner uttered, than the servile crowd opened a passage for the intruder, who walked away with the subject of their merriment.

The person who had so opportunely rescued the poor Highlander from his tormentors, was Mr. John M'Intire, of Lettir, in Argyllshire, at that time Secretary to the British Embassy at Lisbon. He happened to be on the principal quay, when the wild tone of his native language falling on his ear, found an echo in his breast—that echo which the recollection of home never fails to waken in the hearts of his countrymen, and which has formed that bond of union among them, with which they are sometimes reproached by their neighbours. But it appears somewhat inconsistent to reproach an individual for extending to each member of the great family of his nation, those feelings, which, when exercised towards a limited number of his more immediate relations and friends, are considered highly commendable.

Mr. M'Intire, having heard Macquarrie's story, and being assured that he could identify the captain and ship, promised to see that justice should be done to him. In the mean time, he furnished him with a few pieces, and lodgings for the night, promising to call upon him next morning, in order to wait on the Danish captain, to demand compensation for his services and shameful abduction.

The following morning was that of the memorable 1st of November, 1755, when this unfortunate city was almost entirely destroyed by the great earthquake, and sixty thousand of its devoted inhabitants perished in its ruins.

But of this awful visitation, not the most distant sign could be observed one short hour before it took place, as Donald Macquarrie and his friend were crossing the great square of the palace towards the quay where the Danish ship was moored. The sun shone in full splendour on the doomed city, and the greater part of its inhabitants were still enjoying their morning slumbers in fancied security.

The Danish captain at first treated the demands of his late pilot with contempt; but, on learning the importance of the party who had taken up his cause, he reluctantly paid him a sum of money named by Mr. M'Intyre, as a remuneration for his services, and unjust abduction.

Macquarrie pocketed the money, observing to his friend, that he would give it all for an opportunity of meeting the captain alone on the Point of Duart.

Mr. M'Intyre, having adjusted this affair to the entire satisfaction of one of the parties at least, hastened home to transact some important official business, and our *ci-devant* pilot, inspired with that confidence which the acquisition of friends and money naturally bestows, ventured alone to view the wonders of the strange city.

As he happened to pass the Irish convent of Corpo Santo, he recollected it was All Saint's Day, and, being a good Catholic, he entered the chapel, in which were several persons at their devotions, even at this early hour.

He had hardly knelt before the shrine of the Holy Virgin, when himself, and those around him, were buried under the ruins of the convent.

When he had recovered from the amazement into which this sudden and overwhelming calamity had thrown him, he found himself unhurt in a space formed into a species of arch by the falling timbers, and sufficiently large to enable him to stand upright. Although uninjured himself, he was surrounded by the dead and dying, whose cries were heart-rending. After some time, death seemed to relieve the wretched sufferers, as all was silent, save the low, soft tones of a female voice, which poured forth, with exquisite feeling, the thrilling notes of some wild melody. The air was familiar to the young Highlander's ear, and associated in his memory with all the tender reminiscences of his childhood—it was one which his mother had often sung to him in infancy, to soothe his troubled spirit into forgetfulness. The recollection of home rushed upon his mind, and almost unmanned him.

With some difficulty he crawled to the spot from whence the voice issued, and succeeded in bringing the being whose wild notes were so little in unison with the scene around him, to the place where he had been standing when the building fell. His presence restored her to consciousness, for terror had made her delirious, and she addressed him in Irish, which being a dialect of his own language, was perfectly intelligible to the Highlander. To his inquiries as to whether she was hurt, she answered that she escaped with a severe blow on the arm, which, on examination, was found to be fractured. Macquarrie, immediately detaching from the belt the scabbard of his dirk, (he was deprived of the weapon in the scuffle with the Danish captain,) converted it into a splint, and, with the assistance of one of his broad garters, tied up the broken limb. Just as this operation was concluded, a portion of the eastern end of the building gave way, and admitted a stream of light to illumine the obscurity in which they were enveloped.

On hearing the crash of the falling ruins, the terrified female fainted into the arms of her companion in misfortune, and, as the beams of the morning sun, which shone so brightly on this scene of destruction, threw at this instant a strong light on her pale face, they revealed such youthful, and exquisitely moulded features, partly concealed by a profusion of light brown ringlets, that our hero could not resist the temptation of impressing a chaste kiss on her pallid cheek.

After a considerable lapse of time, the timid and sensitive spirit returned once more to the fair and deserted home from which it had been scared, and the unfortunate girl awoke a second time to a consciousness of her dreadful situation. To escape from this living grave by their own unaided exertions, appeared next to impossible, and to expect assistance from others, under the circumstances of a calamity which they concluded must have been general, was still more hopeless.

To add, if possible, to the horrors of their situation, they discovered that the building was on fire; a circumstance probably arising from the lighted tapers, of which great numbers were used on the occasion, in honour of the festival of All Saints.

If no stronger motive to exertion had existed, than simply the preservation of his own life, our pilot might probably, in the apparent hopelessness of any attempt to escape, have resigned himself to a fate which appeared inevitable; for although the light penetrated into his prison, it was admitted, as it were, through a sort of trellis-work on a large scale, formed by the timbers of the roof falling in a transverse direction to the upright pillars and other fixtures of the interior, and overlaid with bricks, mortar, and tiles, in one confused heap. But, that a being so young and beautiful, and so utterly helpless and dependent, should be left to perish without an effort on his part, however hopeless the attempt, to rescue her from the ruins, which must otherwise become her funeral pile, was not to be thought of. All the energies of his mind were therefore thoroughly roused, and the prospect of the noble reward, the preservation of his fair fellow-prisoner—which would follow, should he be successful, lent Herculean strength to his naturally powerful frame.

After some hours of incredible labour, during which he was frequently in danger of being

crushed by the falling ruins, he at length had the unspeakable satisfaction of extricating himself and the fair girl whose life depended on the success of his exertions, from the burning pile, just in time to escape the horrible death which threatened them.

(To be continued.)

BUONAPARTIANA.

(Translated from various French Authorities.)

In 1809, a superior officer of the guard had been lodged in the neighbourhood of Vienna, at the house of an aged canoness, a near relative of John, prince of Lichtenstein. The demands of this military man on his noble hostess were excessive, and far surpassed the usual limits. In a moment, no doubt when the wine of Hungary had somewhat unsettled his intellects, he conceived the unfortunate project of writing to this lady a letter, couched in such extravagant terms, and at the same time in such impertinent language, that the latter felt herself compelled to lay it before the general, Andreossy; begging also for protection, and that she might be ridded, "au plus rite," of such an ungentlemanly guest. The letter was not only regarding herself, but the writer reflected, in no very flattering terms, on the character of one of Napoleon's favourite generals, Lefebre, the gallant Duke of Dantzic.

General Andreossy forwarded this letter to the Prince of Neufchâtel, with that written by the canoness. Both having been submitted to the Emperor, Napoleon gave orders that the officer should next day be present at the parade.

On the morrow, accordingly, at the accustomed hour, and when the troops about to file off were ranged in order of battle in the court of the palace of Shoenbrunn, the emperor, accompanied by Count Bubna, in a hurried step descended the grand staircase; his eye was flashing with the fire of indignation, and in his hand he held the officer's letter.

"Mr. le Major-général," said he to the Prince of Neufchâtel, "let M. . . . come forward." The latter presented himself.

"Is it you, Sir, who have written this infamous letter?" asked Napoleon, showing him the paper.

"Sire, mercy!" articulated the officer, whom the sight of the letter had annihilated. "I knew not what I was writing."

"Wretch! Insult one of my brave lieutenants, and at the same time a woman worthy of respect, a canoness, already to be pitied from having to bear the misfortunes of war! I do not admit your excuse, Sir. I have never admitted one, nor will I ever do so from an officer of the guard. You are guilty of an act of cowardice. I degrade you of the Legion of Honour; you are no longer worthy to wear its revered insignia." Then addressing himself to the general Dorsenne, who inspected the regiment, he said:—"General, see this order executed."

And the emperor, having commanded the filing off, was heard to say to Count Bubna, as they ascended the palace grand staircase:—"To insult an aged woman! I, Monsieur le Comte, I respect an aged woman, as if she were my own mother!"

One evening that the emperor was enjoying the fresh air with Josephine, on the green which bordered the front of la Malmaison, it had been excessively hot, and all the ladies present were seated in a circle around the empress, who was in ecstacies at the beautiful scent of a bouquet she had at her waist, Napoleon picked up a handful of sand, and without any one's being aware of his intention, threw it on his wife's nosegay. The flowers were not a little injured by this sandy shower, and in gently shaking them, Josephine stript them of their leaves.

"Mon Dieu, Buonaparte! how provoking you are!" said she to him, in that sweet voice so peculiar to her, "what did I do to you that you so spoil my flowers?"

"Que tu es enfant!" answered the emperor, kissing her; "do not you see that it is because I am going to get you fresher ones, and flowers gathered with my own hand?"

"I do not believe you."

"Well, you shall see."

And Napoleon, leaping over some beds, soon returned with an enormous nosegay of roses, which he offered to his wife in the most gallant manner. Josephine, having divided the bouquet, distributed it between all the ladies who surrounded her, saying:—"I expect you to follow my example; to preserve these flowers as long as possible, so as never to forget the hand that gives you them, and that which gathered them."

FROM THE JOURNAL OF A BALLOONIST.

Passing a cloud, I put out my hand and took a piece of it, and squeezed it like a sponge, and the water ran out. The sun went north about, but never set. At the distance of about fifty leagues above the earth, we saw a white swan sitting on the corner of a cloud. If we had had a gun we could have shot it. Passing by the moon, we saw a fellow selling land at auction. He wished us to give a bid, but we told him we had not come to buy lands in the moon. We came across a comet, but it was asleep. It looked like a terrapin, but had a tail like a fox. We came near a hail-bank, and filled a hat to bring down with us. The hailstones were about as large as a pigeon's egg. A thousand miles above the earth we passed through a field of turkey buzzards. This would seem to be their region, and accounts for the circumstance, that no one has ever found a nest of one of these. These rookeries are out of sight in the atmosphere. As we approached one of the heavenly bodies, it appeared like an island. We struck upon a planet, but Garnerin got out, and pushed off the balloon. We supposed it to be Mercury, as we heard orators haranguing, and a multitude

of tongues. There were marriages going on in Venus, and in Mars we heard the drums beat. We meant to have a pull at one of Saturn's rings, but we were blown off the coast, and found ourselves in the latitude of Herschell. Provisions failing, we thought proper to shape our course towards the earth again. The first thing we saw was the forest of Ardennes, which appeared like a shamrock. The Pyrenuian mountains seemed like a bed of parsley; and the Atlantic Ocean about as large as Loch Swilley. Within a furlong of the earth, Garnerin gave me the parachute, and I came down.

THE CEDARS OF LEBANON.

It is a belief attached to most early theological systems, that before our planet had fallen into the dark iniquity by which it hath in later ages been oppressed, its fair sceneries and innocent homes were frequented and glorified by the presence of celestial visitants. Oftentimes did the primitive people of the earth behold their "sunlit-winged battalia" sweeping down the bright vales of the young earth, oftentimes there rested on Ararat's dusky crest, mild and luminous colours, "the remnants of their flashing path," often heard the melody of their sky-tuned lips, and gazed enchanted upon their undying beauty. With Abraham, by the Terebinth-grove of Mamre, they participated in friendly conversation; they filled his tent with their light and bloom, vouchsafing to partake of the cakes which the hands of Sarai "the princess" had kneaded; and many times they afterwards appeared to Jacob, Elijah, Ezekiel, and other favoured and elected men.

Lamartine, who, in his "Chute d'un Ange," or, Fall of an Angel, treats upon these sublime things, represents them as winging their way down from the firmaments of heaven, constantly embellishing with their presence the grander scenes of Asia, and commingling in the harmonies which Nature in those parts offered up to the Creator. Among the cedars of Lebanon, which the hand of the Lord himself planted by the Rivers of Waters, they are beheld by him in high vision, amid the deep shadows of evening, resting on their black hill-tops, mixing their voices in the vast sound and solemn swinging of the cedars, which are, at that time, lifting up their lofty hymn. For though man himself would proudly suppose that the noble privilege of praise and thanksgiving was restricted to himself alone, that soul began and ended in him, and that the rest of the creation, termed by the philosopher inanimate, has nothing of that spirituality which characterizes him; yet have some great minds entertained an opposite opinion, and believe that the several kingdoms of creation, which, though "they groan in anguish, sighing to be renewed," yet also have their ways of praise; and even if they have no peculiar voice or language, yet "their voices are heard among them."

Such is the noble opinion, finely expressed, which a recent author of celebrity has put into the mouth of Milton, upon this subject,—

"It would be desolating," says he, "to believe that all the holy music of organ and of harp, of dulcimer and of psaltery ..... It would be horrible to imagine, that all the sounds thus sent up into the air from the beginning of time, had died away in the unconscious abysses of space, unheard, unnoticed, unregarded. Far from us be such unhallowed misgivings! I would rather deem that even the voice of unintelligential matter, is not altogether so abjectless as we are apt to decide, and that the perpetual music of the winds and running waters, with the deep bass of the never-silent sea, are but the hallelujahs sung by the adoring earth, as it rolls before the footstool of its Creator."

In this generous and praiseworthy opinion, Lamartine cordially unites; and in the fine outset of his poem above alluded to, he represents all the cedars of Lebanon raising their magnificent chorus, and pouring it into the ever-open ear of the Almighty.

Holy! Holy! Holy!
Lord whom the hills adore!
Behind those glorious suns,
Towards which we humbly look,
When the odorous wind of night
Doth bow our branches hoar
Beneath thy hand we bend,
As the flowers beside the brook.

But why do we bow down?—
In lowly prayer to HIM!
We feel his presence present,
And as his soft winds go
We tremble through our long arcades
And through our alleys dim,
Our pillars' strength is shaken—
Our lofty domes bend low
As when his storms in anger
Do redden every bower,
And the lion's main stiff waxeth
That clothes his neck of power.

Glide, glide, ye wand'ring breezes here,
Change leaf and spray to sounding strings;
And we, your sounding harps shall bear
Beneath our ever-waving wings,
In swelling and in dying tune
His name to the adoring moon.

Come breathings of the soft warm night,
Fall from high heaven, rise from the plain,
Come to our bowers full of conscious delight,
Pass and repass there, again and again!
Seek ye who proclaimeth the glorious name?
Leave the bright light, and leave the broad wave,
Leave ye the depth of the sea and cave,
Rest not in air or by wind wooing flame,
For we, even we, have a soul to rejoice
In his love, and of which every leaf is a voice!

In the time of King Solomon, this superb forest, of which no doubt the members of the above chorus were progenitors, was called by the name of Domus Saltus-Libani. At the present day it bears the title of Eb Herze. Scarcely anywhere, indeed, than at Lebanon, does the cedar please; it is there one sees it in all its original majesty. One circumstance, as much as any other, has rendered it precious in eastern estimation, which is, the incorruptibility of the wood. The conservation of this forest at the present day, is under the protection of the patriarchal Maronites.

The altitude to which these proud cedars attain, is oftentimes prodigious. Their superb heads are not unfrequently elevated to the height of a hundred feet.

Like giants combining into a formidable body, these trees combine towards the multiplication of themselves, and in the junction of three or four of themselves together; these, in the course of time, form, by the union of their massy trunks, a tree of tremendous girth. Some are thirty and forty feet in circumference, and it would require the extended arms of many men to span its huge rotundity. It was, no doubt, from the sight of this stately spectacle, that caused the poet David to write down "Justus ut Palma florebit, *sicut Cedrus Libani multiplicabitive.*"

It is, indeed, a splendid sight to behold these cedars, thrusting the lower part of their boughs towards the firmament, and lowering them towards their extremity, to the earth. These trees, so especially majestic, whose verdure is perennial, whose branches are immense, tufted, smooth, and horizontal, have each, as regards them singly, the attitude of command which belongs to the King of the Trees. The position of its boughs to which we have just alluded, resembles that of an arm lifted in air, of which the hand is inclined. The trees thus have their monarchy and their monarch. This order, wisely established, everywhere manifests itself in the cedar, gifted as it is with strength and majesty, loftiness and imperishability.

But if this mountain possesses the king of the trees, it serves only as an asylum to the king of the birds. Here it is that the eagle, after having run through the plains of air, or to tear the prey which it has *ravished*, settles on the topmost branches. Ezekiel, in allusion to the conduct of Nebuchadnezzar, makes use of this fine allegorical figure:—"A great eagle, with great wings, long-winged, full of feathers, which had divers colours, came unto Lebanon, and took the highest branch of the cedar." Sacred writ, indeed, abounds with passages upon this ruler of the forest dynasty; Isaiah is perpetually celebrating it, and in chapter after chapter indulges in his favourite expression of "Gloria Libani," the glory of Lebanon.

But it is sometimes used metaphorically by the poets, to illustrate mournful and lamentable events. Zechariah, thinking of the future desolation of the Temple of Jerusalem by the Romans, breaks out into a fine strain, commencing, "Lebanon, open thy gates, that the fire may devour thy cedars." This, it will be seen, alludes more particularly to the temple itself, which was constructed for the most part of the cedars of this forest. At the time of its building, it will be remembered that Solomon sent to Hiram, King of Tyre, saying,—"As thou didst deal with David my father, and didst send him cedars to build him an house to dwell therein, even so deal with me; send me cedar-trees, fir-trees, and algum-trees, out of Lebanon, for I know that thy servants can skill to cut timber in Lebanon."

To which epistle Hiram answered in writing, and among other things, said,—"And we will cut wood out of Lebanon, as much as thou shalt need, and we will bring it to thee in flotes by sea to Joppa, and thou shalt carry it up to Jerusalem."

It is also said that thirty thousand Israelites were sent to be hewers in the mountain, to help the Sidonians in their labour.

At the present remote day, there are planted at the foot of these beautiful cedars, many white stone altars, at which the ecclesiastics say mass. In fine seasons, these cedars are frequented by the christians, who come from all parts of the Ottoman empire, and even from Persia. The Maronites, the inhabitants of all the surrounding villages, go there with their priests; after mass, they eat, drink, sing, and dance to the sound of cymbals, dulcimers, and melodious music. At their departure, the venerable pilgrims carry with them branches of the ever-green cedars, with which, on their arrival at home, they decorate the doors of their houses.

There is a pleasing custom observed by travellers at the present day, which is that of lifting the bark of the cedar, and thereunder inscribing their name, by incision, into the trunk. There is to be seen at this minute the name of an Englishman, bearing the date of 1600. Voyagers still continue this practice; and upon the most beautiful cedars, names are to be found engraven, of Dr. Merryon, Lord North, Lady Stanhope, Taylor, Delaborde, and other distinguished persons.

But that glory which once crowned the mountain, has now much declined, particularly within the last two centuries. There exist now no thousands, from which the floor-beams and roofs of imperial palaces are to be hewn or carved out. Their number is decreased to sixteen. These are certainly fine noble trees, rich of bough and beauty, and certainly still glorious to behold; but, indeed, compared with their former abundance, their present diminished number forms but a sorry contrast; and they cannot but excite, in common with all the other splendid wrecks of the holy city, a melancholy feeling of the glory which once existed, but hath now so utterly departed.

W. ARCHER.

HONOUR.

OWEN FELTHAM says:—There is certainly but one right way to true honour, and that is by virtue and justice; but to that which the world calls honour, namely command, authority, and power, though there may be numerous petty windings, yet the whole may be reduced to only two; one, when God calls, another, when man seeks it without his permission. He that attends to the first, although he may deserve it, seeks it not; and he should not take more than becomes an honest man, for sometimes men are not satisfied with all that reason is able to do, and therefore I find it hath often been waved and refused. Audentius would

not accept the empire, though chosen to it upon the death of Bassianus Caracall; and although Cardinal Pole is by some condemned for losing the papacy, by a strein of too much modesty, yet, if we take his reasons candidly, according to his own expression, which we ought to believe, should nothing be discovered to the contrary, the reason of his non-acceptance was pious and prudent: he pulls upon himself suspicion, that hath not witnesses of his acting clearly and apertly. But of all the examples of this nature, that of Frederick, Duke of Saxony, is most to be honoured, who for his virtues was unanimously chosen by the electors, for emperor. On his declining this honour, they requested that he would recommend them another, which having consented to do, he named Charles V. The emperor, in return for the recommendation, sent Frederick a present of thirty thousand florins; but he that could not be tempted by an imperial crown, was not to be bought by gold, and when the ambassadors found that he would not receive it, they desired his permission to leave ten thousand among his servants. Frederick replied, that they might accept of it if they liked, but he that received a piece from Charles, should not stay a day with Frederick. We read in Scripture of an olive, a fig, and a vine, that would not leave their enjoyments to be kings; but here we find a man, who, without either ambition or avarice, proved himself to be greater than an emperor, in refusing to become one. He that is good, will not from an ill way compass dominion: from him, who, to gain it would never transgress, men may hope for justice and temperance. He is not likely to do amiss on the throne, when the throne itself could not tempt him before he had it; for, since ambition is more violent than any passion beside, he hath showed a noble temper that hath withstood its baneful influence; he that would not do wrong to get it, it is not likely that he will afterwards do wrong to keep it. Fraud may sooner be legitimated in getting an empire, than in the exercise; so that if there be any freedom for man upon earth, it is when a just man holds a government. W. G. C.

New Books.

Physic and Physicians. 2 vols. 8vo. Longman and Co.

[It is probable, readers may imagine the above work to be a dry treatise on medicine and medical cases, but we can assure them it is not so, far from it, for a more lively, entertaining, facetious work, accompanied with good reasoning, and instructive lessons, has seldom appeared. The first volume contains, among much valuable matter, a curious chapter on "Eccentric Medical men," but many of the anecdotes in which have been before "twice told." It has also a dissertation on the "Early Struggles of eminent Medical Men:" which we strongly recommend to the particular attention of all young persons commencing life. Valuable information relative to the Divine Origin of Medicine, of Medicine in Egypt, Ancient Barbarous Surgery, &c. are also given.

In the second volume, are many amusing notices of eminent Physicians and Surgeons; with an important chapter on "Mad-doctors, and Mad-houses;" and a graphic description of the Old College of Physicians, Warwick-lane, blending its history with memoirs of the many bright luminaries, whose brilliant talents have shone refulgently in that far-famed temple of science and of learning.

It is "a consummation devoutly to be wished," that physicians would render their physic as pleasant to the taste, as these volumes are refreshing to our receptive faculties.

We shall, for the present, conclude with the following relation of the

Early struggles of Dr. Elliotson.]

"When I commenced," says Dr. Elliotson, "my professional career, I determined upon trusting for success to working hard, and to conduct myself as well as the infirmity of human nature would allow. I determined, however long I might wait for success, never to fawn upon and run after my superiors, nor to stoop meanly to my inferiors; never to intrigue for an adventure, nor to employ trumpery artifices for making myself known to the public.

"For many years I toiled, and saw many of my contemporaries, many of my juniors, who worked less, but were wiser in their generation, pass by me. I published work after work, edition after edition, and paper after paper was honoured with a place in the *transactions* of the first medical society in Europe: I was physician to a large Metropolitan Hospital, and had attended there, and gratuitously out of doors, above 20,000 patients: but in vain. In 1828, my profession was not more lucrative to me, and was as short of my actual expenses, as it had been in 1818. At that time, the "Lancet" was pleased, now and then, to publish a clinical lecture delivered by me at St. Thomas's, and my practice at once doubled. The following year it published the greater part as I delivered them, and my practice was doubled again. Last season, the same journal published them all, and my practice was doubled a third time. This astonished me the more, as my clinical lectures were generally delivered with little or no premeditation, while all I published myself had cost me great labour, many a headache, and much midnight oil. It was through the general practitioners, in the large majority of instances—and through general practitioners, for the most part, with whom I had not the honour of any acquaintance—that the publication of these lectures accomplished my success. To the body of general practitioners, therefore, I owe a debt of gratitude. They have called me forth spontaneously, from no interested motive, and I cannot exert myself too much in the education of their successors."

HINCHINBROOK HOUSE,

THE SEAT OF THE COUNTESS OF SANDWICH,

Is situated partly in the parish of St. Mary, borough of Huntingdon, and partly in the hundred of Hurstingstone, one mile (W.) from Huntingdon. It occupies the site of a Benedictine nunnery, dedicated to St. James, founded by William the Conqueror.

The mansion is an irregular structure, composed of stone and brick, and contains a trifling portion of the ancient nunnery. It is very pleasantly situated on an elevation, commanding some delightful views over a fine expanse of country, particularly of the rich vale fertilized by the river Ouse.

Hinchinbrook House, at the time of the dissolution of the nunnery, was granted by Henry VIII. to Richard Williams, *alias* Cromwell, Esq.; and whose son, Sir Henry Cromwell, entertained Queen Elizabeth here, August 1564, after her visit to the University of Cambridge. Sir Oliver Cromwell, son of the above Sir Henry, and uncle to the Lord Protector, lived here in such splendid style, that he so much reduced his fortune, immense as it was, as to be obliged to alienate from time to time one or other of his estates, by which means the paternal inheritance of his family was much impaired, and none more so, perhaps, than in the manner he so sumptuously entertained King James here, April 27, 1603. In order to give eclat to the entertainment, he built the very elegant bow-window to the dining-room, in which were shields of the arms of the family, and some armorial bearings of the Williams'. Sir Oliver received the king at the gate of the great court, and conducted him up a walk that then immediately led to the principal entrance of the house. His Majesty here met with a more magnificent reception than he had done since he left his paternal kingdom, both for the plenty and variety of the meats and wines. It is inconceivable with what pleasure the English received the king; all strove to please, and to see the new sovereign, who was to unite two jarring and valiant kingdoms, and to be the common monarch of both. Sir Oliver gratified them to the full, and his doors were thrown wide open to receive all those persons who chose to pay their respects to the new king, or even to see him: even the populace had free access to the cellars, during the whole of his Majesty's stay. Whilst the king was here, he received the heads of the University of Cambridge, in their robes, to congratulate him upon his accession. On James leaving Hinchinbrook House, which he did the 29th of April following, Sir Oliver presented him with "a large elegant-wrought standing cup of gold; goodly horses; deep-mouthed hounds, and divers hawks of excellent wing; and also gave 50*l.* among the royal officers."* For these services, the king created Sir Oliver a knight of the Bath, prior to his coronation.

James also visited Hinchinbrook House in 1605, 1616, and 1617.

In 1627, Sir Oliver sold the above mansion to Sir Sydney Montague, ancestor of the present noble proprietor.

At seven o'clock in the morning, on the 22d January, 1830, Hinchinbrook House was discovered to be on fire: the splendid bow-window, painted glass, and the valuable carved arm-chairs, models of ships of war, &c., in Queen Elizabeth's room, and other valuable property, to the amount of many thousands of pounds, were destroyed; but fortunately the library, paintings, with part of the furniture, were preserved; and among the portraits, was one of Mrs. Cromwell, the mother of Oliver, Lord Protector.

* Stow's Chronicle.

NOTES ON NATURAL HISTORY BOOKS.

RENNIE'S INSECT ARCHITECTURE.

(*Continued from page* 24.)

Cells of the Hive-bee, p. 111.—Much credit for sagacity and ingenuity has been ascribed to bees for constructing their cells of a hexagonal form; and it has been asserted, that there is no other form equally saving of room under the circumstances; but in Barrow's *Tour through Ireland*, this opinion is shown to be erroneous. At the meeting of the *Entomological Society*, October 1, 1838, Mr. Waterhouse stated, that in the formation of the cells of a bee-hive, many bees work simultaneously; but, in that of the cells of a wasp's nest, only one works. He said, that one bee commences the building of a cell, but before it has finished others begin. Thus the cells intersect or press upon others, that which is absurdly called the royal cell, retaining its original state and form, being built by one single insect. He contended that the ordinary shape of the cells of the bee was matter of mechanical necessity, or of chance. The shape is not always the same, being sometimes hexagonal, and at other times heptagonal, the sides and angles also varying in proportion. The power of working the cell is in the antennæ, by which it's shape and condition is learnt by the insect. The shape of the *royal* cell is that of a Florence flask, with the neck considerably truncated, and is larger and stouter than the other cells. From his observations it appeared that the hexagon is a form adopted by necessity, so as to give a greater space.

The Hive-bee's progress in America.—"In Britain hive-bees are not found in a wild state; though it is not uncommon for swarms to stray from their proprietors. But these stray swarms do not spread colonies through our woods, as they are said to do in America. In the remoter parts of that continent there are no wild bees. They precede civilization; and thus, when the Indians observe a swarm, they say, 'the white man is coming.'" (p. 143.)

Washington Irving has published an account of the progress which the hive-bee is making westward in America; and the same fact is mentioned by Bartram, in his *Travels through N. and S. Carolina, E. and W. Florida, &c.*, 1791.—"In conversation with a Dr. Grant, in company with whom he happened for a short time to travel, Bartram inquired how it was that westward, among the Creek Indians, he had seen no bees? Dr. Grant replied, that there were few or none west of the Isthmus of Florida, and but one hive in Mobile, which was lately brought from Europe, the English supposing there were none in the country, not finding any when they took possession after the Spanish and French. 'I have,' says our traveller, 'been assured by the traders that there are no bees in West Florida, which, to me, seems extraordinary, and almost incredible, since they are so numerous all along the eastern coast, from Nova Scotia to East Florida, even in the wild forest, as to be thought, by the generality of the inhabitants, aborigines of this continent.' At the present time, the honey-bee is abundant throughout the United States, both as a denizen of the forest, and a dependant on man. Generally speaking, the settler in the backwoods prefers the precarious but luscious supply afforded by those swarms which have deserted man, and taken up their abode in fissures of rocks or hollows of trees, to the more regular, but less abundant, supply from hives of his own."—*Entomological Magazine*, iii., 423.)

Saw Fly.—To the particulars respecting the habits of saw-flies (*Tenthredinidæ*,) given at page 152, we may add the following:—

"The caterpillars of the hawthorn saw-fly (*Trichiosoma lucorum*,) having been particularly abundant this season, (1834,) on all the hawthorns around Dundee, I have had," says Mr. William Gardener, "an opportunity of observing their habits, and can corroborate the curious fact of their ejecting from the pores of their bodies, a liquid, in thin fountain-like columns, as stated by Mr. J. H. Fennell, in the *Magazine of Natural History*, vol. vi., p. 157. When they appear in their last skin, no trace of this habit remains. The fluid, which is of a green colour, and strong disagreeable odour, is spirted with such violence, as often to force it to the distance of more than a foot from the insect; and its use is, perhaps, to defend the caterpillar in its more tender state, from the annoyance of the Ichneumon-flies. In the last stage of its growth the head, which, in the previous stages, was black, is of a bright red colour, gradually softening into yellow towards the sides; and the body appears less mealy-like, but is thickly covered with white transverse ridges. They feed only during the night, and repose themselves, half coiled up, on the under sides of the leaves throughout the day. They first made their appearance here about the 22nd of June, and in the beginning of August were transformed into pupæ. I have found Mr. Woodward's beautiful figure and description of the cocoon (*Magazine of Natural History*, v., 85,) perfectly accurate, with the exception of his supposing it possible that the fibrous appearance of it was owing, in part, to the aglutinated hairs of the larva. The larva, unfortunately, cannot apply its hairs to such a purpose, for the best of all reasons, because it has none."—(*Magazine of Natural History*, viii., p. 268.)

Food of the larva of the May-fly. (*Ephemeræ.*)—"It feeds, if we may judge from its *egesta*, upon the slime, or moistened clay with which its hole [in the banks of rivers, &c.,] is lined." (p. 206.)

We have often kept numbers of the larvæ of may-flies, and observed that when any of them died they soon disappeared. We believe the survivors eat them.

The Ant-lion. (p. 209.) A writer in the *Entomological Magazine*, (iii., 461,) says,

that as far as his observations went on the larva of *Myrmeleon Libelluloides*, a very common species in the Ionian Islands, it does not excavate a pit, but lurks under ground, running like a mole, and leaving a track behind it. He says he saw the larvæ attempting for three hours to devour a beetle (*Asidea grisea*,) whose wing-cases proving too hard, it escaped uninjured.

Sleep of Animals.—"All observers agree that *ants* labour in the night; and a French naturalist is, therefore, of opinion that they never sleep,—a circumstance which is well ascertained with respect to other animals, such as the *shark*, which will track a ship in full sail for weeks together." (p. 261.)

The golden carp (*Cyprinus auratus*,) according to Dr. Hancock, is never observed to sleep. (See *Quarterly Journal of Science*, No. xvi., p. 291.)

Spider's Silk. (p. 335.)—At the *Society of Arts*, a few years ago, a specimen of silk was exhibited, reeled from a live garden-spider (*Aranea diadema*,) by a very ingenious apparatus. The fibre was finer than that of the silk-worm, and more opake, its colour was white, with a high metallic lustre, so that it more nearly resembled silver wire than any other substance.

Effects of Electric States of the Weather upon Animals. (p. 344.)—"'Frogs, cats, and other animals,' says M. D'Isjonval, 'are affected by natural electricity, and feel the change of weather; but no other animal more than myself and my spiders.' During wet and windy weather, he accordingly found that they spun very short lines; 'but when a spider spins a long thread, there is a certainty of fine weather for at least ten or twelve days afterwards.'" (p. 344.)

See an article on the effects of Electricity upon Animals, published in the *Field Naturalist's Magazine*, ii., 91.

White Ants (*Termites*). (p. 287.) At the Entomological Society's meeting, on Feb. 1, 1836, was exhibited a specimen of the nest of the white ants, being the first brought to this country. It was of small size, though some are as high as ten or twelve feet. Several spherical case-fuzes, destroyed by the woodant of Barbadoes, were also exhibited, from the United Service Museum, to which collection they had been forwarded by Lieutenant-Colonel Biron. At a previous meeting, on January 6, 1834, was exhibited a piece of wood greatly perforated by *Termites* in the East Indies; and Captain Smee observed, that, from observations he had made in India, it appeared to him that *Termites* were much more destructive in consequence of a powerful acid which they leave upon everything they pass over, than from their merely feeding upon such substances.

Insects spinning Egg-bags. (p. 354.)—It is well known that most spiders spin pouches for their eggs; but the only insects known to spin one for theirs, are the water-beetles of the genus Hydrophilus. (See Kirby and Spence's *Introduction to Entomology*, iii., p. 72.)

Mason-spider, (*Mygale nidulans*, &c.) At the Entomological Society's meeting, on January 1, 1838, Mr. Shipster exhibited a nest of a mason-spider (*Mygale*,) from Australia, differing from that of others of the genus in its lid or door being semicircular, and not turning back entirely, but being held as if by a spring.

Cleanliness of Spiders and Insects.—"On coming down the Maine, by the steam-boat, from Frankfort, in August, 1829, we observed the geometric net of a conic spider (*Epeira conica*,) on the frame-work of the deck, and as it was covered with flakes of soot from the smoke of the engine, we were surprised to see a spider at work on it, for, in order to be useful, this sort of net must be clean. Upon observing it a little closely, however, we perceived that she was not constructing a net, but dressing up an old one; though not, we must think, to save trouble, so much as an expenditure of material. Some of the lines she dexterously stripped of the flakes of soot adhering to them; but, in the greater number, finding that she could not get them sufficiently clean, she broke them quite off, *bundled them up, and tossed them over.* We counted five of these *packets of rubbish* which she thus threw away, though there must have been many more, as it was some time before we discovered the manœuvre, the packets being so small as not to be readily perceived, except when placed between the eye and the light. When she had cleared off all the sooted lines, she began to replace them in the usual way." (p. 368.)

In the *Entomological Magazine*, iii., p. 337, a writer states that he has often observed *flies*, when covered with pollen, busy themselves in scraping it off, and then *roll it up into a pellet* with the fore-legs, and throw it away with a sort of jerk. J. H. F.

WALKING.

In the act of walking, the centre of gravity is raised, alternately, over the legs. The motion somewhat resembling that of a pair of open compasses, made to rest alternately on their points; the centre of gravity is over the fork of the legs, and may be imagined to be over the angle of the compasses. If, as the compasses are thus made to travel forwards, resting on their alternate points, these points are not placed in the same straight line, but alternately to the right and left of it, then the centre of gravity will describe a series of arcs to the right and left, and it will not be carried so far forwards, by a certain number of steps, as though these were made in the same right line; this corresponds to that ungainly motion in walking, which is called waddling. It is remarkable how nearly the footsteps of a person who walks well, are in the same straight line, as may be seen, especially if we trace them in the snow: this is, moreover, remark-

ably the case with animals, horses for instance; and especially it is the case with birds, whose centres of gravity being for the most part very high, in comparison with the dimensions of their feet, they are taught instinctively to avoid those deflexions of their bodies to the right and left, by which they might be overthrown. Taking the width of a man's foot at about three inches, and giving him an average stature, it may be calculated that a deflexion of his body of less than two degrees would, when he rests on either foot, be sufficient to overthrow him. How justly regulated, then, must be the effort which he makes at every step, to transfer his centre of gravity from above one of his feet to above the other, that his position may be kept within this narrow limit! Put upon his shoulders a burden, and you will raise his centre of gravity, and greatly increase the difficulty he will experience in balancing himself; yet how firmly and securely does he tread! A man carrying a burden as heavy as himself, and inclining his position as he steps on each foot, only half a degree to the right or left of the position in which he would rest on that foot, would be overthrown. At each step the centre of gravity is raised, and made to revolve over the foot. It is this raising of the centre of gravity, in which the whole weight of the body may be supposed to be collected, which constitutes the great effort of walking. It has been calculated that at every step the centre of gravity is raised a perpendicular height, equal to about one-eleventh the length of the step; so that a person who walks eleven miles, raises his centre of gravity, and, therefore, the whole weight of his body, a succession of lifts, equivalent to the direct raising of it, one mile. If six men, weighing each 182lbs., and a boy of half that weight, walk at the rate of eleven miles in three hours, the aggregate of their labour, while thus walking, will be about equal to one horse's power; as the amount of a horse's power is usually estimated.—*Moseley's Illustrations of Science.*

Notitia Antiquaria.

PARISH REGISTERS.

The monks, prior to the reformation, were the registrars of the births, marriages, and deaths, in the several parishes; there were, however, no regular registries till the dissolution of the monasteries in 1538, when, by the injunction of Thomas Lord Cromwell, it was directed, the parson, vicar, or the curate, should make the entries and keep the books. In St. Swithin's, and one or two other parishes in the City of London, their registers are, however, dated two or three years earlier. By the books of the Churchwardens' accounts for St. Margaret, Westminster, it appears they, in 1538, paid two-pence for a registry-book, pursuant to Lord Cromwell's directions; and by a letter of that date, from Sir Pearce Edgecombe, in Cornwall, to Lord Cromwell, in the State-paper Office, it is mentioned, the introduction of these registry-books had caused great discontent in the counties of Devon and Cornwall, the people fearing it was the beginning of new taxes, which they would have to pay for their marriages, christenings, and burials. A canon of Queen Elizabeth's, directed that copies of the parish registers should be forwarded to the bishops of the several dioceses, a practice which was complied with for many years.

HERALDIC SEALS.

The first English seal bearing an armorial device, was that of King Richard I. Arnulphus, Earl of Flanders, had borne a heraldic seal about 940, or two centuries and a-half before the use of heraldic seals in England.

DEEDS.

Deeds, in the olden times, were in Latin, or Norman-French—the earliest known instance of one written in English, was one between the abbot and convent of Whitby, and Robert, the son of John Bustard, dated at York, in 1343.

Biography.

ROBERT RECORDE.

In the present advanced state of literature and science, when there are daily issuing from the press so many approved books and elaborate disquisitions on all kinds of subjects, we are by no means apt to reflect upon the disadvantages and continual discouragements which must have encompassed the studious only a century or two ago, from the then-existing deficiency of facilities for the acquirement of learning. It becomes then the duty of the biographer, to bring to light, and immortalize the memories of those individuals who rendered themselves eminent by their literary compositions, in by-gone ages; but this remark will appl, with even greater strictness to those who have written treatises upon scientific subjects, because works of this kind, more than any others, are calculated to expand the reasoning faculties of the human mind, and to enhance materially the comforts and conveniences of our existence. Without the aid of science, the sailor could not traverse with security the trackless expanse of the ocean; the mechanic would have no system upon which to work; and without it, those stupendous architectural structures, which have excited the admiration of existing and preceding generations, could never have been constructed; and yet, strange to say, scientific biography has been but litlte attended to, and many eminent philosophers who lived and died centuries ago, have been almost forgotten, and passed over in silence.

Among the various individuals who may properly be said to have conferred advantages upon the study of science in the sixteenth cen-

tury, the name of Dr. Robert Recorde occupies a very exalted and enviable position. To him must be allotted the palm for first rendering the elementary branches of the mathematics easily to be comprehended by beginners. He was of a very respectable family in Wales. We have no information as to the exact period of his birth, but it was no doubt very early in the sixteenth century, as he was entered at All Souls' College, Oxford, about the year 1525, and was presented with a fellowship, A. D. 1531, being then a Bachelor of Arts; but whether or not he attained the degree of M. A. is not known for certainty. He soon afterwards went to the university of Cambridge, having entered upon the profession of physic, and took the degree of Doctor of Medicine, A. D. 1545. He was held in high estimation by all those who had the good fortune to be acquainted with him, for his extensive knowledge in the arts and sciences; and, as Fuller says:—"his soul did not live in the lane of a single science;" but he was, on the contrary, a man of general erudition. Tanner mentions some marginal notes of his on Alexander Essebiens, a MS. in Corpus Christi College, Cambridge, which he considers an evidence that he understood the Saxon language. At Oxford, he principally brought himself into notice by his lectures upon arithmetic, algebra, geometry, &c., and other branches of the mathematics; "in which," Wood says, "he made everything so clearly understood, that no one ever did the like before him in the memory of man." After leaving Oxford, he repaired to London, and was made principal physician to Edward VI. and to Queen Mary; but it would appear that the sunshine of royal favour did not confer any real or permanent advantage upon poor Recorde, for he was shortly afterwards confined for debt in the King's Bench prison, Southwark, where he died, A. D. 1558, having hardly passed the prime of life. Pitt gives him a very high character for general worth, as well as for his excellent acquirements in every branch of knowledge, philosophy, polite literature, astronomy, natural history, physic, &c. The following is a list of his mathematical works:—

1. "*The Pathway to Knowledge*, containing the first principles of geometrie, as they may most aptly be applied unto practice, both for use of instruments, geometricall and astronomicall, and also for projection of plattes necessary for all sortes of men." Lond. 1551, and 1574. 4to.

2. "*The Castle of Knowledge*, containing the explication of the sphere, both celestiall and materiall, and divers other things incident thereto. With sundry pleasant proofes and certain new demonstrations not written before in any vulgare workes." Lond. 1551, 4to. 1556, fol. and 1596, 4to.

3. *The Whetstone of Witte*." Lond. 1557, 4to. This work is now very scarce: it is a treatise upon algebra; and a full analysis and description of it is given in Dr. Hutton's Mathematical Dictionary.

4. *The Ground of Arts*, teaching the perfect worke and practise of arithmeticke, both in whole numbers and fractions, after a more easie and exact forme than in former time hath been set forth." Lond. 1549, 1558, 1561, 1571, 1590, 1618, 1623, 1637, 1640. 8vo. When the first edition of this book was printed, is not known. The writer of this memoir has a copy in his possession, printed in 1640, and contains all the editions made by Dr. John Dee, John Mellis, R. C., and Robert Hartwell. On the other side of the title-page are the following lines by Dr. Dee.

"That which my friend hath well begun,
For very love to common weale,
Need not all whole to be new done,
But now encrease I do reveale.

Something herein I once redrest,
And now again for thy b-hoofe,
Of scale I do, and at request,
Both mend and adde, fit for all proofe.

Of numbers' use, the endlesse might,
No wit nor language can expresse,
Apply and try both day and night
And then this truth thou wilt confesse."

Next is the book's verdict, as follows:

"To please or displease sure I am,
But not of one sort to every man;
To please the best, that would I faine,
The froward displease shall I certaine,
Yet wish I will, though not with hope,
All ears or mouths to please or stoppe."

After these lines, comes the dedication to Prince Edward the Sixth, and then the preface to the reader, in which Recorde complains bitterly of the neglect of science in England, and the far greater encouragement offered to learning in foreign parts.

Besides the works above enumerated, he composed some medical treatises. He also collated the first and third books of Fabian's Chronicle, and undertook the ancient description of England and Ireland; but whether these were published or not, we are uninformed. It is certain, however, that Recorde did undertake to make a translation of Euclid's Elements of Geometry, since it is thus noticed by Dr. John Dee, in his metrical address at the end of an edition of the *Ground of Arts*.

"The ground most sure, whereon this race
With speedfull courage must be past,
Of late hath turned his Greekish face
By English tilth, which aye will last.

The famous Greeke of Plato's lore,
Euclide I mean, geometer,
So true, so plaine, so fraught with store
As in our speech is yet no where."

Sherburne says, that Recorde published three other books; one entitled "Cosmographia Illustrata;" another, "De arte faciendi Horologium;" and a third, "De usu Globorum et de statu Temporum."

J. C. W.

POLYTECHNIC EXPERIMENTS.

(For the Mirror.)

A word or two, by way of Introduction.

THE series of papers under this head will be devoted to the *Illustration of* NATURAL PHILOSOPHY *by means of* EXPERIMENT; and of exhibiting its practicable application to the advancement of Arts and Manufactures.—Those works, strictly experimental, which have been hitherto published, are simply *amusing*, without reference to the *principles involved*, and are therefore of no more use than a scientific toy in the hands of an infant. The object of the contributor of this Series, is to place a *complete body of Natural Philosophy* before the reader, in a form so little technical, and so palpably demonstrated, as to become part and parcel of his modes of thought. Now, in an age like the present, when the physical sciences are the grand object of human pursuit, such a method will, it is presumed, be best calculated to attain the object proposed.

EXPERIMENTS IN CHEMISTRY.

The Three Attractions.

1. *Gravitation.*—2. *Cohesion.*—3. *Affinity.*

Attraction of Gravitation.

Any body placed at a distance from the earth, and detached, will fall to the earth; and all bodies placed on the surface will be pressed to it with a certain force. The earth and all bodies in its neighbourhood obey the grand law of attraction of gravitation: and the earth and moon would approach and *coalesce*, did not other causes interfere to prevent it. The force of gravitation is,—*in proportion to the* QUANTITY *of matter*; and the quantity of matter constituting the bulk of any body greatly varies. *Lead* and *Feathers*, for instance. This fact, that every body has *its own bulk of a given weight*, gives rise to the term *specific gravity* as applied to each.

Experiment 1st.—Specific Gravity.

In order to ascertain the *specific gravity* of bodies, or, in other words, to compare weight and bulk, WATER is made use of. When a solid is immersed in a fluid, that solid is pressed upwards by a weight of fluid equal to the bulk of the solid; therefore the latter *loses so much of its weight* by immersion. To prove this as a general principle, tie a heavy weight, such as you can scarcely lift, to a rope, and drop it into a river; while the weight is under water, you can raise it easily; but all your strength will not enable you to lift it out of the water. You now understand the principle; and therefore all you have to do in order to arrive at the specific gravities of substances, is, to tie the solid with a hair to a delicate balance, and let it hang in water; in the opposite *scale* add weights; and the said weights will represent the weight of the water, which equals the solid in bulk, and was displaced by it. In order to render this quite familiar, suppose a piece of metal to weigh 6 ounces, and that when weighed in water it loses so much, that 1 ounce was required in the *scale* to restore the equilibrium: thus 1 ounce was the weight of the metal's bulk of water, and the metal weighed six times the weight of its own bulk of water; therefore, the weight of water displaced is written down 1—; and the specific gravity of the metal is written down 6: or rather, as there are frequently fractional parts which it is necessary to express, one is written 1000—, and the other, 6000—.

The reader is very earnestly requested to peruse the above attentively, as he will otherwise be at a loss to understand some of the simplest statements in chemistry.

Experiment 2d.—Attraction of Cohesion.

All bodies in the universe exert, as has already been stated, an attractive power over each other; and so also do the particles of which bodies are constituted, or we should have no solids. But attraction of cohesion may also be proved to exist between *separate* masses of matter, and in a very striking and beautiful manner. Take two pieces of lead, each an inch square, and half an inch thick: let one side of each be cut smooth and fine with a sharp knife, so that one piece may slide easily over the other. Let one of these be suspended from a small wooden stand by means of a hook; and let there be a hook to the other piece, to which hang a small scale-pan: then, by means of a *sliding* motion, press the two pieces of lead to each other, and they will adhere with such force, that several pounds weight, gradually placed in the scale-pan, will not be sufficient to separate them. Liquids are cohesive; but air, gas, and vapour, evince no cohesion; they are governed by a principle that will be explained hereafter.

Attraction of Affinity.

When attraction of affinity—that is, *chemical attraction*—acts upon bodies, it produces a considerable, and sometimes an entire change in them. Innocent substances become destructive; and noxious ones, harmless, in many instances, when so operated on.

Two of the *bitterest* substances in nature, viz. hyposulphate of soda, and nitrate of silver, do, when combined, produce a compound remarkable for *sweetness*.

Atmospheric air is composed of the same ingredients as that most destructive liquid, *aqua-fortis!*

In order to form that nutritious and indispensable article of consumption, *common salt*, bring together, by way of

Experiment 3d.

Sodium and *chlorine*. The former (strange as it may appear) is a *metal*, and the latter, a *gas*; both of very violent properties; both *fatal* when taken into the stomach; and, when combined, bursting into flame. But, immediately on this chemical combination

being formed, *common salt*, a most harmless and nutritious substance, is the product!—In order to make this experiment judiciously, the tyro should consult a practical chemist.

Attraction of affinity (or chemical attraction) subsists between bodies of *different* kinds; but attraction of cohesion between bodies of the *same* kind.

Decomposition.

Every substance in nature is supposed to have an affinity for some other substance; and the *same* substance may have *various* affinities, some *stronger* and some *weaker*. In this case, the presence of a more attractive substance causes what is called *decomposition*.

Experiment 4th.

Add nitric acid to magnesia: they will combine. Add lime to this compound; the lime will combine with the nitric acid, and the magnesia will be detached and appear in a separate form. This is decomposition, and is going on throughout all nature. By this means rock becomes soil; soil is transmuted into vegetation; and vegetation (by being assimilated) is converted into animal substance.

M.

PHENOMENA OF NATURE.

Dr. Poppig, in his Voyage to Chili, says:—"From the top-mast [this was on the coast of Chili] the sea appeared, as far as the eye could reach, of a dark red colour, and this in a streak, the breadth of which was estimated at six English miles. As we sailed slowly along, we found that the colour changed into brilliant purple, so that even the foam, which is always seen at the stern of a ship under sail, was of a rose colour. The sight was very striking, because this purple streak was marked by a very distinct line from the blue waters of the sea, a circumstance which we the more easily observed, because our course lay directly through the midst of this streak, which extended from south-east to north-west. The water, taken up in a bucket, appeared, indeed, quite transparent, but a faint purple tinge was perceptible, when a few drops were placed upon a piece of white china, and moved rapidly backwards and forwards in the sunshine. A moderate magnifying glass, proved that those little red dots, which, with great attention, could be discerned with the naked eye, consisted of Infusoria,* [minute animals,] which were of a spherical form, entirely destitute of all external organs of motion. . . . . We sailed for four hours, at a mean rate of six English miles an hour, through this streak, which was seven miles broad, before we reached the end of it, and its superficies must therefore have been about one hundred and sixty-eight English square miles. If we add, that these animals may have been equally distributed in the upper suratum of the water, to the depth of six feet, we must confess that their numbers infinitely surpassed the conception of the human understanding."

Captain Otto von Kotzebue, in his Voyage of Discovery into the South Sea, also noticed a similar phenomenon on the coast of Africa. He says:—"We observed on the surface of the sea a serpentine streak, about two fathoms broad, of a dark brown colour, which extended as far as the eye could reach. At first sight, I took it for a shoal, but, when we had let down a boat, and brought some of the water on board, we found that it was formed of a countless number of small crabs and the seed of a plant, which, as our naturalists affirmed, grows at the bottom of the sea."

*For remarks on the classes and wonders of *Infusoria* we refer our readers to a delightful account of them in that interesting periodical, the *Foreign Monthly Review*, No. III. from which work the above notice is extracted.

LINES,

On seeing Mr. Creswick's beautiful painting, "Sweet Summer Time," in the Exhibition of the Royal Academy, June, 1839.

"Sweet summer time," to pass life's hours
In such a pleasant spot,
Where Nature rears umbrageous bowers
With all the world forgot.
How like a dream might life so pass away,
No clouds save those that tell the closing day.

Yet would the heart be dull and lone,
Imperfect all its bliss,
Could we not share with one—our own,
A paradise like this.
Oh, yes! man's joys are feeble, wanting, small,
Tasted alone—'tis woman crowns them all.

The heart of man is full of love,
Like dew that falls from Heav'n;
To some fair shrine its hopes to prove
It ever will be giv'n.
'Tis Nature's law, and wisely justly blends,
One universal love that God intends.

"Sweet summer time," oh, passing sweet,
'Mid those old trees to stray,
Whose branches mingle as they meet,
Thus pass the hours away.
Too soon doth winter chill bright manhood's prime,
Too little to the heart comes summer time.

Θετα.

TRIAL OF COURAGE.

As the Anglo-Saxons admired valour and intrepidity above all other qualities, they were anxious to discover whether their sons would be possessed of them or not, and had various methods of putting their courage to the trial, even in infancy. The following is said to have been one of these modes of trial. Upon a certain day appointed for that purpose, the family and friends being assembled, the father placed his son upon the slanting side of the roof of his house, and there left him. If the child began to cry, and was afraid of falling, the spectators were much dejected, and prognosticated that he would be a coward; but if he clung boldly to the thatch, and discovered no marks of fear, they were transported with joy, and pronounced that he would prove a great warrior.

The Gatherer.

A few days since M. Daguerre exhibited, in one of the rooms attached to the Chamber of Deputies, several specimens of the products of the Daguerréotype. Among them were views of three streets of the capital, the interior of M. Daguerre's atelier, and a group of busts in the collection of the Louvre. The deputies who examined them, and who continued to crowd the room throughout the day, were particularly struck with the marvellous minuteness of detail which these views, and especially those of the streets, exhibited. In one, representing the Pont Marie, all the minutest indentations and divisions of the ground or the building, the goods lying on the wharf, even the small stones under the water at the edge of the stream, and the different degrees of transparency given to the water, were all shown with the most incredible accuracy. The use of a magnifying glass revealed an affinity of other details quite undistinguishable by the naked eye, and more particularly in the foliage of trees. The antique busts are said to have been rendered by this method with very great beauty of effect. The chemical substance upon which the light acts, according to M. Daguerre's method, is laid upon sheets of copper, which, for the drawing, exhibited on Saturday, were about nine or ten inches by six or seven inches. The expense of such plates M. Daguerre estimates at about 3fr. 50c. each, but he expects that considerable reductions may be ultimately made in their cost, and that the improvement of his method will render it applicable to other substances not metallic.—*Galignani.*

The great essential to our happiness is the resolution to perform our duty to God as well as we are able; and when this resolution is deeply infixed, every action and every pursuit brings satisfaction to the mind.

Hampton Court.—The royal apartments at Hampton Court will henceforward be closed on the Friday of each week instead of Saturday.

A Clincher.—Two gentlemen walking together, were talking of the senses, seeing, feeling, and the like. One remarked, that his sense of hearing was remarkable for its acuteness, while the other was not wonderfully endowed in this respect, but observed that his vision was wonderful. "Now to illustrate," said he; "I can see a fly on the spire of yonder church." The other, looking sharply at the place indicated, "Ah!" said he, "I can't see him, but I can hear him step!"

People are all the summer learning to leave a door open, and the whole winter learning to close it.

The stature of the mind, like that of the body, sometimes stops growing for years, and again will shoot up, one knoweth not how, in a few hours; some characters are made in a moment.

An ingenuous American Editor.—A country paper, puffing a new store, says, in conclusion, "We got a prime pair of boots for putting this in."

Interesting to Wine-bibbers.—A French journal says, that cabbage is an infallible remedy for intoxication from wine, and that it has also the power of preventing it.

The influence of the good man ceases not at death; he, as the visible agent, is removed, but the light and *influence of his example* still remain, and the moral elements of this world will long show the traces of their vigour and purity; just as the western sky, after the sun is set, still betrays the glowing traces of the departed orb.

Virtue wants more admirers, wisdom more supplicants, truth more real friends, and honesty more practitioners.

Philanthropy wants a residence, and fidelity an asylum.

Tacitus says, early marriages make us immortal, that it is the soul and chief prop of empire, and that the man who resolves to live without woman, or the woman who resolves to live without man, are enemies to themselves, destructive to the world, apostates from nature, and rebels against heaven and earth.

Singular Effect of the Storm.—During the severe storm of thunder and lightning which prevailed at Bromley, Kent, and its vicinity, on Sunday week last, about half-past 10, a body of fluid was observed to burst apparently at a short distance, and to break into innumerable zigzag coruscations of light of intense brilliancy and superb colours. The radiations flew in all directions, and the burst of light was instantaneously followed by two tremendous explosions, which shook the buildings in the neighbourhood.

The Horse Guards Clock was illuminated for the first time, on Tuesday evening last, by means of the "Bude-light," which falls on the face, thus differing from the ordinary transparent clocks, to which it is much superior, both in clearness and beauty. It gives the clock-face an appearance of being shone upon by a very powerful moonlight.

A Wise Parrot.—There is an Eastern story told of a person who taught his parrot to repeat only the words, "What doubt is there of that?" He carried it to the market for sale, fixing the price at one hundred rupees. A Mogul asked the parrot, "Are you worth one hundred rupees?" The parrot answered, "What doubt is there of that?" The Mogul was delighted, and bought the bird. He soon found out that this was all it could say. Ashamed now of his bargain, he said to himself, "I was a fool to buy this bird." The parrot exclaimed as usual, "What doubt is there of that?"

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